

Organization Applicant

 Street :
 City :
 State :
 Country :
 PostalCode :
 PhoneNumber :
 FaxNumber :
 EmailAddress :
 <110> OrganizationName : Max-Planck-Gesellschaft

Application Project

 <120> Title : Novel genetically encoded bioindicators of calcium-ions
 <130> AppFileReference : G62276PC
 <140> CurrentAppNumber :
 <141> CurrentFilingDate : ____-__-__

Earlier Applications

 <150> PriorAppNumber : EP 03016691.2
 <151> PriorFilingDate : 2003-08-04

Sequence

 <213> OrganismName : Artificial Sequence
 <400> PreSequenceString :
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 tacctgagca ccagatccgc cctgagcaaa gacccaacg agaagcgcga tcacatggtc 660
 ctgctggagt tcgtgaccgc cgcccgcgtg ctcagcgagg agatgattgc tgagttcaaa 720
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 ctcagtgtga gcaagggcga ggagctgttc accgggggtg tgcccatcct ggtcgagctg 1200

G62276PC.WorkFile.txt

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taa 1863

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<212> Type : DNA
<211> Length : 1863
      SequenceName : TN-L15
      SequenceDescription :

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Custom Codon

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Sequence Name : TN-L15

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Sequence

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<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
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VNRIELKGID FKEDGNILGH KLEYNISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA 180
DHYQQNTPIG DGPVLLPDNH YLSTQSALS DPNEKRDHML LLEFVTAARM LSEEMIAEFK 240
AAFDMFDADG GGDISTKELG TVMRMLGQNP TKEELDAIIE EVDEDGSGTI DFEEFLVMV 300
RQMKEDAKGK SEEELANCFR IFDKNADGFI DIEELGEILR ATGEHVIEED IEDLMKDSK 360
NNDGRIDFDE FLKMMEGVQE LMVSKGEELF TGVVPILVEL DGDVNGHKFS VSGEGEDAT 420
YGKLTCLKFIC TTGKLPVPWP TLVTTFGYGL MCFARYPDHM RQHDFFKSAM PEGYVQERTI 480
FFKDDGNYKT RAEVKFEGDT LVNRIELKGI DFKEDGNILG HKLEYNYNH NVYIMADKQK 540
NGIKANFKIR HNIEDGSVQL ADHYQQNTPI GDGPVLLPDN HYSYQSALS KDPNEKRDHM 600
VLLEFVTAAG ITLGMDELYK 620
<212> Type : PRT
<211> Length : 620
      SequenceName : TN-L15prot
      SequenceDescription :

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Sequence

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<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
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G62276PC.WorkFile.txt

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cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg taccatcttc 300
ttcaaggacg acggcaacta caagaccgcg gccgaggtga agttcgaggg cgacaccctg 360
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gagctgttca ccgggggtgt gccatcctg gtcgagctgg acggcgacgt aaacggccac 1260
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gccctgagca aagaccccaa cgagaagcgc gatcacatgg tcctgctgga gttcgtgacc 1860
gccgcccggga tcaactctcg catggacgag ctgtacaagt aa 1902

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<212> Type : DNA

<211> Length : 1902

SequenceName : TN-humTC

SequenceDescription :

Custom Codon

Sequence Name : TN-humTC

Sequence

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<213> OrganismName : Artificial Sequence
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LVTTLTWGVQ CFSRYPDHMK QHDFFKSAMP EGYVQERTIF FKDDGNYKTR AEVKFEGDTL    120
VNRIELKGID FKEDGNILGH KLEYNISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA      180
DHYQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHML LLEFVTAARM LMDDIYKAAV     240
EQLTEEKNE FKAAFDIFVL GAEDGCISTK ELGKVMRMLG QNPTPEELQE MIDEVDEDGS     300
GTVDFDEFLV MMVRCMKDDS KGKSEEELSD LFRMFDKNAD GYIDLDELKI MLQATGETIT     360
EDDIEELMKD GDNNDGRID YDEFLEFMKG VEELMVSKEG ELFTGVVPIL VELDGDVNGH     420
KFSVSGEGEG DATYGKLTLL FICTTGKLPV PWPTLVTTFG YGLMCFARYP DHMRQHDFFK     480
SAMPEGYVQE RTIFFKDDGN YKTRAEVKFE GDTLVNRIEL KGIDFKEDGN ILGHKLENY      540
NSHNVYIMAD KQKNGIKANF KIRHNIEDGS VQLADHYQQN TPIGDGPVLL PDNHYSYQS      600
ALSKDPNEKR DHMVLLFVLT AAGITLGMDE LYK                                  633
<212> Type : PRT
<211> Length : 633
      SequenceName : TN-humTCprot
      SequenceDescription :

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Sequence

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<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
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ggcgacgtaa acggccacag gttcagcgtg tccggcgagg gcgagggcga tgccacctac    120
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc    180
ctcgtgacca ccctgacctg gggcggtgcag tgcttcagcc gctaccccca ccacatgaag    240
cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg taccatcttc    300
ttcaaggacg acggcaacta caagaccgcg gccgaggtga agttcgaggg cgacaccctg    360
gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac     420
aagctggagt acaactacat cagccacaac gtctatatca ccgccgacaa gcagaagaac     480
ggcatcaagg ccacttcaa gatccgccac aacatcgagg acggcagcgt gcagctcgcc     540
gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac     600
tacctgagca ccagtcctgc cctgagcaaa gaccccaacg agaagcgaga tcacatggtc     660
ctgctggagt tcgtgaccgc cgcccgcatg ctgagcgagg agatgattgc tgagttcaaa     720
gctgcctttg acatgtttga tgcggacggt ggtggggaca tcagcaccaa ggagttgggc     780
acggtgatga ggatgctggg ccagaacccc accaaagagg agctggatgc catcatcgag     840
gaggtggacg aggatggcag cggcaccatc gacttcgagg agttcctggt gatgatggtg     900
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G62276PC.WorkFile.txt

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taa 1863

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<212> Type : DNA
<211> Length : 1863
      SequenceName : TN-L15 D107A
      SequenceDescription :

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Custom Codon

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Sequence Name : TN-L15 D107A

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Sequence

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<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
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VNRIELKGID FKEDGNILGH KLEYNISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA 180
DHYQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHML LLEFVTAARM LSEEMIAEFK 240
AAFDMFDADG GGDISTKELG TVMRMLGQNP TKEELDAIIE EVDEGSGTI DFEEFLVMV 300
RQMKEDAKGK SEEELANCFR IFAKNADGFI DIEELGEILR ATGEHVIEED IEDLMKDSK 360
NNDGRIDFDE FLKMMEGVQE LMVSKGEELF TGVVPILEVEL DGDVNGHKFS VSGEGEGDAT 420
YGKLTCLKFIC TTGKLPVPWP TLVTTFGYGL MCFARYPDHM RQHDFFKSAM PEGYVQERTI 480
FFKDDGNYKT RAEVKFEGDT LVNRIELKGI DFKEDGNILG HKLEYNYNH NVYIMADKQK 540
NGIKANFKIR HNIEDGSVQL ADHYQNTPI GDGPVLLPDN HYSYQSALS KDPNEKRDHM 600
VLLEFVTAAG ITLGMDELYK 620

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<212> Type : PRT
<211> Length : 620
      SequenceName : TN-L15 D107Aprot

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SequenceDescription :

Sequence

<213> OrganismName : Artificial Sequence

<400> PreSequenceString :

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ttcaagtccg ccatgcccga aggctacgtc caggagcgca ccatcttctt caaggacgac	1500
ggcaactaca agaccgcgcg cgagggtgaag ttcgagggcg acaccctggt gaaccgcac	1560
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cagaacaccc ccatcggcga cggccccgtg ctgctgcccc acaaccacta cctgagctac	1800
cagtccgccc tgagcaaaga ccccaacgag aagcgcgatc acatggtcct gctggagtgc	1860

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<212> Type : DNA

<211> Length : 1908

SequenceName : TN-TnCf1

SequenceDescription :

Custom Codon

Sequence Name : TN-TnCf1

Sequence

<213> OrganismName : Artificial Sequence

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VNRIELKGID FKEDGNILGH KLEYNISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA	180
DHYQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHML LLEFVTAARM LMASMTDQQA	240
EARAFLSEEM IAEFKAAFDL FDADGGGDIS TKELGTVMRM LGQNPTKEEL DAIIEEVED	300
SGGTIDFEEF LVMMVRQMK EDAKGKSEEEL ANCFRIFDKN ADGFIDIEEL GEILRATGEH	360
VIEEDIEDLM KDSKNNNDGR IDFDEFKMM EGVQELMVSK GEELFTGVVP ILVELDGDVN	420
GHKFSVSGEG EGDAYGKLT LKFICTTGKL PVPWPTLVTT FGGLMCFAR YPDHMRQHDF	480
FKSAMPEGYV QERTIFFKDD GNYKTRAEVK FEGDTLVNRI ELKGIDFKED GNILGHKLEY	540
NYNSHNVYIM ADKQKNGIKA NFKIRHNIED GSVQLADHYQ QNTPIGDGPV LLPDNHYLSY	600
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<212> Type : PRT

<211> Length : 635

SequenceName : TN-TnCf1prot

SequenceDescription :

Sequence

<213> OrganismName : Artificial Sequence

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gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac	600
tacctgagca ccagtcctgc cctgagcaaa gaccccaacg agaagcgca tcacatggtc	660
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G62276PC.WorkFile.txt

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aagggcatcg acttcaagga ggacggcaac atcctggggc acaagctgga gtacaactac     1260
aacagccaca acgtctatat catggccgac aagcagaaga acggcatcaa ggccaacttc     1320
aagatccgcc acaacatcga ggacggcagc gtgcagctcg ccgaccacta ccagcagaac     1380
accccatcg gcgacggccc cgtgctgctg cccgacaacc actacctgag ctaccagtcc     1440
gccctgagca aagaccccaa cgagaagcgc gatcacatgg tcctgctgga gttcgtgacc     1500
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<212> Type : DNA

<211> Length : 1542

SequenceName : TN-TnC-EF2

SequenceDescription :

Custom Codon

Sequence Name : TN-TnC-EF2

Sequence

<213> OrganismName : Artificial Sequence

<400> PreSequenceString :

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VNRIELKGID FKEDGNILGH KLEYNISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA      180
DHYQQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHNV LLEFVTAARM LGQNPTKEEL     240
DAIIIEVDED GSGTIDFEEF LVMMVRQMKE DAELMVSKGE ELFTGVVPIL VELDGDVNGH     300
KFSVSGEGEG DATYGKLTLC FICTTGKLPV PWPTLVTTFG YGLMCFARYP DHMRQHDFFK     360
SAMPEGYVQE RTIFFKDDGN YKTRAEVKFE GDTLVNRIEL KGIDFKEDGN ILGHKLEYNH     420
NSHNVYIMAD KQKNGIKANF KIRHNIEDGS VQLADHYQQN TPIGDGPVLL PDNHVLSYQS     480
ALSKDPNEKR DHMVLLEFVT AAGITLGMDE LYK                                  513

```

<212> Type : PRT

<211> Length : 513

SequenceName : TN-TnC-EF2prot

SequenceDescription :

Sequence

<213> OrganismName : Artificial Sequence

<400> PreSequenceString :

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atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctggt cgagctggac      60

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G62276PC.WorkFile.txt

ggcgacgtaa	acggccacag	gttcagcgtg	tccggcgagg	gcgagggcga	tgccacctac	120
ggcaagctga	ccctgaagtt	catctgcacc	accggcaagc	tgcccgtgcc	ctggcccacc	180
ctcgtgacca	ccctgacctg	gggcgtgcag	tgcttcagcc	gctaccccga	ccacatgaag	240
cagcacgact	tcttcaagtc	cgccatgccc	gaaggctacg	tccaggagcg	taccatcttc	300
ttcaaggacg	acggcaacta	caagacccgc	gccgaggtga	agttcgaggg	cgacaccctg	360
gtgaaccgca	tcgagctgaa	gggcatcgac	ttcaaggagg	acggcaacat	cctggggcac	420
aagctggagt	acaactacat	cagccacaac	gtctatatca	ccgccgacaa	gcagaagaac	480
ggcatcaagg	cccacttcaa	gatccgccac	aacatcgagg	acggcagcgt	gcagctcgcc	540
gaccactacc	agcagaacac	ccccatcggc	gacggccccg	tgctgctgcc	cgacaaccac	600
tacctgagca	cccagtcgcg	cctgagcaaa	gaccccaacg	agaagcgcga	tcacatggtc	660
ctgctggagt	tcgtgaccgc	cgcccgcatt	ctaattggcg	caatgacgga	ccagcaggcg	720
gaggcccgcg	ccttcctcag	cgaggagatg	attgctgagt	tcaaagctgc	ctttgacatg	780
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gctgatgggt	tcacgacat	cgaggagctg	ggtgagattc	tcagggccac	tggggagcac	1080
gtcatcgagg	aggacataga	agacctcatg	aaggattcag	acaagaacaa	tgacggccgc	1140
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gaactgagca	aaaaacttca	tgccaagata	gactcagtgg	atgaggaaag	gtatgacaca	1440
gaggtgaagc	tacagaagac	taacaaggag	ctggaggacc	tgagccagaa	gctgtttgac	1500
ctgaggggca	agttcaagag	gccacctctg	cgccgggtgc	gcatgtctgc	tgatgccatg	1560
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caagtcaaga	aggaggacac	ggagaaggag	aaggacctcc	gcgatgtggg	tgactggagg	1680
aagaacattg	aggagaaatc	tggcatggag	ggcaggaaga	agatgtttga	ggccggcgag	1740
tccgagctca	tggtgagcaa	gggcgaggag	ctgttcaccg	gggtgggtgcc	catcctggtc	1800
gagctggacg	gcgacgtaaa	cggccacaag	ttcagcgtgt	ccggcgaggg	cgagggcgat	1860
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tggcccaccc	tcgtgaccac	cttcggctac	ggcctgatgt	gcttcgcccg	ctaccccagc	1980
cacatgcgcc	agcacgactt	cttcaagtcc	gccatgcccc	aaggctacgt	ccaggagcgc	2040
accatcttct	tcaaggacga	cggcaactac	aagacccgcg	ccgaggtgaa	gttcgagggc	2100

G62276PC.WorkFile.txt

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gacaccctgg tgaaccgcat cgagctgaag ggcacgcact tcaaggagga cggcaacatc 2160
ctggggcaca agctggagta caactacaac agccacaacg tctatatcat ggccgacaag 2220
cagaagaacg gcatcaaggc caacttcaag atccgccaca acatcgagga cggcagcgtg 2280
cagctcgccg accactacca gcagaacacc cccatcgggc acggccccgt gctgctgccc 2340
gacaaccact acctgagcta ccagtccgcc ctgagcaaag accccaacga gaagcgcgat 2400
cacatggtcc tgctggagtt cgtgaccgcc gccgggatca ctctcggcat ggacgagctg 2460
tacaagtaa 2469
<212> Type : DNA
<211> Length : 2469
      SequenceName : TN-TnCf1-GG-TnIf1
      SequenceDescription :

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Custom Codon

Sequence Name : TN-TnCf1-GG-TnIf1

Sequence

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-----
<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
MVSKGEELFT GVVPILEVELD GDVNGHRFSV SGEGEGDATY GKLTCLKFICT TGKLPVPWPT 60
LVTTLTWGVQ CFSRYPDHMK QHDFFKSAMP EGYVQERTIF FKDDGNYKTR AEVKFEGDTL 120
VNRIELKGID FKEDGNILGH KLEYNYISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA 180
DHYQQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHNV LLEFVTAARM LMASMTDQQA 240
EARAFLSEEM IAEFKAAFDN FDADGGGDIS TKELGTVMRM LGQNPTKEEL DAIIEEVDED 300
GSGTIDFEEF LVMMVRQMKE DAKGKSEEEL ANCFRIFDKN ADGFIDIEEL GEILRATGEH 360
VIEEDIEDLM KDSKDNNDGR IDFDEFKMM EGVQELGGMS DEEKKRRAAT ARRQHLKSAM 420
LQLAVTEIEK EAAAKEVEKQ NYLAEHSPPL SLPGSMQELQ ELSKKLHAKI DSVDEERYDT 480
EVKLQKTNKE LEDLSQKLFD LRGKFKRPPL RRVMSADAM LRALLGSKHK VNMDLRANLK 540
QVKKEDTEKE KDLRDVGWDR KNIEEKSGME GRKKMFEAGE SELMVSKGEE LFTGVVPILV 600
ELDGDVNGHK FSVSGEGEGD ATYGKLTCLKF ICTTGKLPVP WPTLVTTFGY GLMCFARYPD 660
HMRQHDFFKS AMPEGYVQER TIFFKDDGNY KTRAEVKFEG DTLVNRIELK GIDFKEDGNI 720
LGHKLEYNYN SHNVYIMADK QKNGIKANFK IRHNIEDGSV QLADHYQQNT PIGDGPVLLP 780
DNHYLSYQSA LSKDPNEKRD HNVLLFVTA AGITLGMDEL YK 822
<212> Type : PRT
<211> Length : 822
      SequenceName : TN-TnCf1-GGTnIf1 prot
      SequenceDescription :

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Sequence

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-----
<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctggt cgagctggac 60
ggcgacgtaa acggccacag gttcagcgtg tccggcgagg gcgagggcga tgccacctac 120
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc 180

```

G62276PC.WorkFile.txt

ctcgtgacca ccctgacctg gggcgtgcag tgcttcagcc gctaccccga ccacatgaag	240
cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg taccatcttc	300
ttcaaggacg acggcaacta caagacccgc gccgaggtga agttcgaggg cgacaccctg	360
gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac	420
aagctggagt acaactacat cagccacaac gtctatatca ccgccgaaa gcagaagaac	480
ggcatcaagg cccacttcaa gatccgccac aacatcgagg acggcagcgt gcagctcgcc	540
gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac	600
tacctgagca cccagtccgc cctgagcaaa gaccccaacg agaagcgcga tcacatggtc	660
ctgctggagt tcgtgaccgc cgcccgcatg ctcgctgatg ccatgctgcg tgccctgctg	720
ggctccaagc acaagggtcaa cggcggcgcg tcaatgacgg accagcaggc ggaggccccg	780
gccttcctca gcgaggagat gattgctgag ttcaaagctg cctttgacat gtttgatgcg	840
gacggtggtg gggacatcag caccaaggag ttgggcacgg tgatgaggat gctgggccag	900
aacccacca aagaggagct ggatgccatc atcgaggagg tggacgagga tggcagcggc	960
accatcgact tcgaggagtt cctggtgatg atggtgcgcc agatgaaaga ggacgccaag	1020
ggcaagtctg aggaggagct ggccaactgc ttccgcattc tcgacaagaa cgctgatggg	1080
ttcatcgaca tcgaggagct gggtagatt ctcagggccca ctggggagca cgtcatcgag	1140
gaggacatag aagacctcat gaaggattca gacaagaaca atgacggccg cattgacttc	1200
gatgagttcc tgaagatgat ggagggtgtg caggagctca tggtagcaa gggcgaggag	1260
ctgttcaccg ggggtggtgcc catcctggtc gagctggacg gcgacgtaaa cggccacaag	1320
ttcagcgtgt ccggcgaggg cgaggcgat gccacctacg gcaagctgac cctgaagttc	1380
atctgcacca ccggcaagct gcccgtgccc tggcccaccc tcgtgaccac cttcggctac	1440
ggcctgatgt gcttcgcccc ctaccccgac cacatgcgcc agcacgactt cttcaagtcc	1500
gccatgcccc aaggctacgt ccaggagcgc accatcttct tcaaggacga cggcaactac	1560
aagacccgcg ccgaggtgaa gttcgagggc gacaccctgg tgaaccgat cgagctgaag	1620
ggcatcgact tcaaggagga cggcaacatc ctggggcaca agctggagta caactacaac	1680
agccacaacg tctatatcat ggccgacaag cagaagaacg gcatcaaggc caacttcaag	1740
atccgccaca acatcgagga cggcagcgtg cagctcgccg accactacca gcagaacacc	1800
cccatcggcg acggccccgt gctgctgccc gacaaccact acctgagcta ccagtccgcc	1860
ctgagcaaaag accccaacga gaagcgcgat cacatggtcc tgctggagtt cgtgaccgcc	1920
gccgggatca ctctcggtcat ggacgagctg tacaagtaa	1959

<212> Type : DNA

<211> Length : 1959

SequenceName : TN-TnI116-135-GG-TnCf1

SequenceDescription :

Custom Codon

Sequence Name : TN-TnI116-135-GG-TnCf1

Sequence

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-----
<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
MVSKGEELFT GVPVILVELD GDVNGHRFSV SGEGEDATY GKLTCLKFICT TGKLPVPWPT      60
LVTTLTWGVQ CFSRYPDHMK QHDFFKSAMP EGYVQERTIF FKDDGNYKTR AEVKFEGDTL      120
VNRIELKGID FKEDGNILGH KLEYNYISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA      180
DHYQQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHNV LLEFVTAARM LADAMLRLALL      240
GSKHKVNGGA SMTDQQAEAR AFLSEEMIAE FKAADFMDFA DGGGDISTKE LGTVMRMLGQ      300
NPTKEELDAI IEEVDEDEGSG TIDFEEFLVM MVRQMKEDAK GKSEEEELANC FRIFDKNADG      360
FIDIEELGEI LRATGEHVIE EDIEDLMKDS DKNNDGRIDF DEFLKMMEGV QELMVSKGEE      420
LFTGVVPILV ELDGDVNGHK FSVSGEGEGD ATYGKLTCLKF ICTTGKLPVP WPTLVTTFGY      480
GLMCFARYPD HMRQHDFFKS AMPEGYVQER TIFFKDDGNY KTRAEVKFEG DTLVNRIELK      540
GIDFKEDGNI LGHKLEYNYN SHNVYIMADK QKNGIKANFK IRHNIEDGSV QLADHYQQNT      600
PIGDGPVLLP DNHYLSYQSA LSKDPNEKRD HMLLEFVTA AGITLGMDL YK                  652

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<212> Type : PRT
<211> Length : 652
      SequenceName : TN-TnI116-135-GG-TnCfl prot
      SequenceDescription :

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Sequence

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<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctggt cgagctggac      60
ggcgacgtaa acggccacag gttcagcgtg tccggcgagg gcgagggcga tgccacctac      120
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc      180
ctcgtgacca ccctgacctg gggcgtgcag tgcttcagcc gctaccccga ccacatgaag      240
cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg taccatcttc      300
ttcaaggacg acggcaacta caagaccgcg gccgaggtga agttcgaggg cgacaccctg      360
gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac      420
aagctggagt acaactacat cagccacaac gtctatatca ccgccgaaa gcagaagaac      480
ggcatcaagg ccacttcaa gatccgccac aacatcgagg acggcagcgt gcagctcgcc      540
gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac      600
tacctgagca ccagtcctgc cctgagcaaa gaccccaacg agaagcgaga tcacatggtc      660
ctgctggagt tcgtgaccgc cgcccgcatg ctagacctga gccagaagct gtttgacctg      720
aggggcaagt tcaagaggcc acctctgcgc cgggtgcgca tgtctgctga tgccatgctg      780
cgtgccttgc tgggctccaa gcacaaggtc ggcagcggca gcatgctaag ggcgtcaatg      840
acggaccagc aggcggaggc ccgccccttc ctcagcgagg agatgattgc tgagttcaaa      900
gctgcctttg acatgtttga tgcggacggt ggtgggggaca tcagcaccaa ggagttgggc      960

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G62276PC.WorkFile.txt

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acggtgatga ggatgctggg ccagaacccc accaaagagg agctggatgc catcatcgag 1020
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cgccagatga aagaggacgc cgagctcatg gtgagcaagg gcgaggagct gttcaccggg 1140
gtggtgcccc tcctggtcga gctggacggc gacgtaaacy gccacaagtt cagcgtgtcc 1200
ggcgagggcg agggcgatgc cacctacggc aagctgaccc tgaagtcat ctgcaccacc 1260
ggcaagctgc ccgtgccctg gcccaccctc gtgaccacct tcggctacgg cctgatgtgc 1320
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ggctacgtcc aggagcgcac catcttcttc aaggacgacg gcaactacaa gaccgcgcc 1440
gaggtgaagt tcgagggcga caccctggtg aaccgcatcg agctgaaggg catcgacttc 1500
aaggaggacg gcaacatcct ggggcacaag ctggagtaca actacaacag ccacaacgtc 1560
tatatcatgg ccgacaagca gaagaacggc atcaaggcca acttcaagat ccgccacaac 1620
atcgaggacg gcagcgtgca gctcgccgac cactaccagc agaacacccc catcggcgac 1680
ggccccgtgc tgctgcccga caaccactac ctgagctacc agtccgccct gagcaaagac 1740
cccaacgaga agcgcgatca catggtcctg ctggagttcg tgaccgccgc cgggatcact 1800
ctcggcatgg acgagctgta caagtaa 1827
<212> Type : DNA
<211> Length : 1827
SequenceName : TN-TnI95-133-GSG-TnCN90
SequenceDescription :

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Custom Codon

Sequence Name : TN-TnI95-133-GSG-TnCN90

Sequence

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<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
MVSKGEELFT GVPILVELD GDVNGHRFSV SGEGEDATY GKLTCLKFICT TGKLPVPWPT 60
LVTTLTWGVQ CFSRYPDHMK QHDFFKSAMP EGYVQERTIF FKDDGNYKTR AEVKFEGDTL 120
VNRIELKGID FKEDGNILGH KLENYNISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA 180
DHYQQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHML LLEFVTAARM LDLSQKLFDL 240
RGKFKRPPLR RVRMSADAML RALLGSKHKV GSGSMLMASM TDQQAERAF LSEEMIAEFK 300
AAFDMFDADG GGDISTKELG TVMRMLGQNP TKEELDAIIE EVDEDGSGTI DFEEFLVMV 360
RQMKEDAELM VSKGEELFTG VVPILVELDG DVNGHKFSVS GEGEGDATYG KLTCLKFICTT 420
GKLPVPWPTL VTTFGYGLMC FARYPDHMRQ HDFFKSAMPE GYVQERTIFF KDDGNYKTRA 480
EVKFEGDTLV NRIELKGIDF KEDGNILGHK LEYNYNSHNV YIMADKQKNG IKANFKIRHN 540
IEDGSVQLAD HYQQNTPIGD GPVLLPDNH YLSYQSALSKD PNEKRDHMLV LEFVTAAGIT 600
LGMDELYK 608
<212> Type : PRT
<211> Length : 608
SequenceName : TN-TnI95-133-GSG-TnCN90 prot
SequenceDescription :

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Sequence

<213> OrganismName : Artificial Sequence

<400> PreSequenceString :

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atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctggt cgagctggac      60
ggcgacgtaa acggccacag gttcagcgtg tccggcgagg gcgagggcga tgccacctac      120
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc      180
ctcgtgacca ccctgacctg gggcgtgcag tgcttcagcc gctaccccga ccacatgaag      240
cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg taccatcttc      300
ttcaaggacg acggcaacta caagaccgcg gccgagggtga agttcgaggg cgacaccctg      360
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aagctggagt acaactacat cagccacaac gtctatatca ccgccgaaa gcagaagaac      480
ggcatcaagg ccacttcaa gatccgccac aacatcgagg acggcagcgt gcagctcgcc      540
gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac      600
tacctgagca ccagtcgcg cctgagcaaa gacccaacg agaagcgaga tcacatggtc      660
ctgctggagt tcgtgaccgc cgcccgcatg ctgctgacag aagagcagaa aaatgagttc      720
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atcgatgagg tggacgagga cggcagcggc acggtggact ttgatgagtt cctgggtcatg      900
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ttccgcatgt ttgacaaaaa tgctgatggc tacatcgacc tggatgagct gaagataatg     1020
ctgcaggcta caggcgagac catcacggag gacgacatcg aggaactcat gaaggacgga     1080
gacaagaaca acgacggccg catcgactat gatgagttcc tggagtcat gaaggggtgtg     1140
gaggagctca tggtagcaa gggcgaggag ctgttcaccg ggggtggtgcc catcctggtc     1200
gagctggacg gcgacgtaaa cggccacaag ttcagcgtgt ccggcgaggg cgagggcgat     1260
gccacctacg gcaagctgac cctgaagtcc atctgcacca ccggcaagct gcccgtgccc     1320
tggccacccc tcgtgaccac cttcggctac ggcctgatgt gcttcgcccg ctaccccgac     1380
cacatgcgcc agcacgactt cttcaagtcc gccatgcccg aaggctacgt ccaggagcgc     1440
accatcttct tcaaggacga cggcaactac aagaccgcg ccgaggtgaa gttcgagggc     1500
gacaccctgg tgaaccgat cgagctgaag ggcacgact tcaaggagga cggcaacatc     1560
ctggggcaca agctggagta caactacaac agccacaacg tctatatcat ggccgacaag     1620
cagaagaacg gcatcaaggc caacttcaag atccgccaca acatcgagga cggcagcgtg     1680
cagctcgccg accactacca gcagaacacc cccatcggcg acggccccgt gctgctgccc     1740
gacaaccact acctgagcta ccagtcgcc ctgagcaaaag accccaacga gaagcgcgat     1800
cacatggtcc tgctggagtt cgtgaccgcc gccgggatca ctctcgcat ggacgagctg     1860
tacaagtaa

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<212> Type : DNA

<211> Length : 1869
 SequenceName : TN-humTC-L12
 SequenceDescription :

Custom Codon

 Sequence Name : TN-humTC-L12

Sequence

 <213> OrganismName : Artificial Sequence
 <400> PreSequenceString :
 MVSKGEELFT GVPILVELD GDVNGHRFSV SGEGEGDATY GKLTCLKFICT TGKLPVPWPT 60
 LVTTLTWGVQ CFSRYPDHMK QHDFFKSAMP EGYVQERTIF FKDDGNYKTR AEVKFEGDTL 120
 VNRIELKGID FKEDGNILGH KLEYNISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA 180
 DHYQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHML LLEFVTAARM LLTEEQKNEF 240
 KAAFDIFVLG AEDGCISTKE LGKVMRMLGQ NPTPEELQEM IDEVDEDGSG TVDFDEFLVM 300
 MVRCMKDDSK GKSEEELSDL FRMFCKNADG YIDLDELKIM LQATGETITE DDIEELMKDG 360
 DKNNDGRIDY DEFLEFMKGV EELMVSKGEE LFTGVVPILV ELDGDVNGHK FSVSGEGEGD 420
 ATYGKLTCLKF ICTTGKLPVP WPTLVTTFGY GLMCFARYPD HMRQHDFFKS AMPEGYVQER 480
 TIFFKDDGNY KTRAEVKFEG DTLVNRIELK GIDFKEDGNI LGHKLEYNYN SHNVYIMADK 540
 QKNGIKANFK IRHNIEDGSV QLADHYQNT PIGDGPVLLP DNHYLSYQSA LSKDPNEKRD 600
 HMLLEFVTA AGITLGMDL YK 622
 <212> Type : PRT
 <211> Length : 622
 SequenceName : TN-humTC-L12 prot
 SequenceDescription :

Sequence

 <213> OrganismName : Homo sapiens
 <400> PreSequenceString :
 atggatgaca tctacaaggc tgcggtagag cagctgacag aagagcagaa aaatgagttc 60
 aaggcagcct tcgacatctt cgtgctgggc gctgaggatg gctgcatcag caccaaggag 120
 ctgggcaagg tgatgaggat gctggggccag aacccacccc ctgaggagct gcaggagatg 180
 atcgatgagg tggacgagga cggcagcggc acggtggact ttgatgagtt cctgggtcatg 240
 atggttcggt gcatgaagga cgacagcaaa gggaaatctg aggaggagct gtctgacctc 300
 ttccgcatgt ttgacaaaaa tgctgatggc tacatcgacc tggatgagct gaagataatg 360
 ctgcaggcta caggcgagac catcacggag gacgacatcg aggagctcat gaaggacgga 420
 gacaagaaca acgacggccg catcgactat gatgagttcc tggagttcat gaaggggtgtg 480
 gagtag 486
 <212> Type : DNA
 <211> Length : 486
 SequenceName : cardiac hTnC
 SequenceDescription :

Custom Codon

 Sequence Name : cardiac hTnC

Sequence

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<213> OrganismName : Homo sapiens
<400> PreSequenceString :
MDDIYKAAVE QLTEEKQNEF KAAFDIFVLG AEDGCISTKE LGKVMRMLGQ NPTPEELQEM      60
IDEVDEDGSG TVDFDEFLVM MVRCKMKDDSK GKSEEELSDL FRMFDKNADG YIDLDELKIM      120
LQATGETITE DDIEELMKDG DKNNDGRIDY DEFLEFMKGV E                            161
<212> Type : PRT
<211> Length : 161
      SequenceName : cardiac hTnC prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Homo sapiens
<400> PreSequenceString :
atggcggatg ggagcagcga tgcggctagg gaacctcgcc ctgcaccagc cccaatcaga      60
cgccgctcct ccaactaccg cgcttatgcc acggagccgc acgccaagaa aaaatctaag      120
atctccgcct cgagaaaatt gcagctgaag actctgctgc tgcagattgc aaagcaagag      180
ctggagcgag aggcggagga gcggcgcgga gagaaggggc gcgctctgag caccgctgc      240
cagccgctgg agttgaccgg gctgggcttc gcggagctgc aggacttgat cgcacagctc      300
cacgcccgtg tggacaaggt ggatgaagag agatacgaca tagaggcaaa agtcaccaag      360
aacatcacgg agattgcaga tctgactcag aagatctttg accttcgagg caagtttaag      420
cggcccaccc tgcggagagt gaggatctct gcagatgcca tgatgcaggc gctgctgggg      480
gcccgggcta aggagtccct ggacctgcgg gcccacctca agcaggtgaa gaaggaggac      540
accgagaagg aaaaccggga ggtgggagac tggcggaaga acatcgatgc actgagtgga      600
atggagggcc gcaagaaaaa gtttgagagc tga                                  633
<212> Type : DNA
<211> Length : 633
      SequenceName : cardiac hTnI
      SequenceDescription :

```

Custom Codon

```

-----
Sequence Name : cardiac hTnI

```

Sequence

```

-----
<213> OrganismName : Homo sapiens
<400> PreSequenceString :
MADGSSDAAR EPRPAPAPIR RRSSNYRAYA TEPHAKKSK ISASRKLQK TLLLQIAKQE      60
LEREAEERRG EKGRALSTRC QPLELTGLGF AELQDLQRQL HARVDKVDEE RYDIEAKVTK      120
NITEIADLTQ KIFDLRGKFK RPTLRRVRIS ADAMMQALLG ARAKESLDLR AHLKQVKKED      180
TEKENREVGD WRKNIDALSG MEGRKKKFES                                  210
<212> Type : PRT
<211> Length : 210
      SequenceName : cardiac hTnI prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Homo sapiens
<400> PreSequenceString :

```


G62276PC.WorkFile.txt

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atgacggacc agcaggctga ggccaggtcc tacctcagcg aagagatgat cgctgagttc      60
aaggctgcct ttgacatgtt tgatgctgat ggtggtgggg acatcagcgt caaggagttg      120
ggcacggtga tgaggatgct gggccagaca cccaccaagg aggagctgga cgccatcatc      180
gaggaggtgg atgaggacgg cagcggcacc atcgacttcg aggagttctt ggtcatgatg      240
gtgcgccaga tgaaagagga cgcgaaaggg aagagcgagg aggagctggc cgagtgcctc      300
cgcattcttcg acaggaatgc agacggctac atcgacccgg aggagctggc tgagattttc      360
agggcctccg gggagcacgt gactgacgag gagatcgaat ctctgatgaa agacggcgac      420
aagaacaacg acggccgcat tgacttcgac gagttcctga agatgatgga gggcgtgcag      480
taa                                                                    483

```

```

<212> Type : DNA
<211> Length : 483
      SequenceName : skeletal hTnC
      SequenceDescription :

```

Custom Codon

```

-----
Sequence Name : skeletal hTnC

```

Sequence

```

-----
<213> OrganismName : Homo sapiens
<400> PreSequenceString :
MTDQQAERS YLSEEMIAEF KAAFDMFDAD GGGDISVKEL GTVMRMLGQT PTKEELDAII      60
EEVDEDESGT IDFEFLVMM VRQMKEDAKG KSEEELAECF RIFDRNADGY IDPEELAEIF      120
RASGEHVTDE EIESLMKDGD KNNDGRIDFD EFLKMMEGVQ      160
<212> Type : PRT
<211> Length : 160
      SequenceName : skeletal hTnC prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Gallus gallus
<400> PreSequenceString :
atggcgtcaa tgacggacca gcaggcggag gcccgcgcct tcctcagcga ggagatgatt      60
gctgagttca aagctgcctt tgacatgttt gatgcggacg gtggtgggga catcagcacc      120
aaggagttgg gcacggtgat gaggatgctg ggccagaacc ccaccaaaga ggagctggat      180
gccatcatcg aggaggtgga cgaggatggc agcggcacca tcgacttcga ggagttcctg      240
gtgatgatgg tgcgccagat gaaagaggac gccaagggca agtctgagga ggagctggcc      300
aactgcttcc gcatcttcga caagaacgct gatgggttca tcgacatcga ggagctgggt      360
gagattctca gggccactgg ggagcacgtc atcgaggagg acatagaaga cctcatgaag      420
gattcagaca agaacaatga cggccgcatt gacttcgatg agttcctgaa gatgatggag      480
ggtgtgcagt aa                                                                    492
<212> Type : DNA
<211> Length : 492
      SequenceName : chicken skeletal TnC
      SequenceDescription :

```

Custom Codon

```

-----

```

Sequence Name : chicken skeletal TnC

Sequence

```

-----
<213> OrganismName : Gallus gallus
<400> PreSequenceString :
MASMTDQAE ARAFLSEEMI AEFKAADFMD DADGGGDIST KELGTVMRML GQNPTKEELD      60
AIIEEVEDDG SGTIDFEEFL VMMVRQMKED AKGKSEEELA NCFRIFDKNA DGFIDIEELG      120
EILRATGEHV IEEDIEDLMK DSDKNNDGRI DFDEFLKMME GVQ                        163
<212> Type : PRT
<211> Length : 163
      SequenceName : chicken skeletal TnC prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Gallus gallus
<400> PreSequenceString :
atgtctgatg aagagaaaaa gaggagggca gccaccgccc ggcgccagca cctgaagagt      60
gctatgctcc agcttgctgt cactgaaata gaaaaagaag cagctgctaa agaagtggaa      120
aagcaaaact acctggcaga gcattgccct cctctgtccc tcccaggatc catgcaggaa      180
cttcaggaac tgtgcaaaaa gcttcatgcc aagatagact cagtggatga ggaaaggtat      240
gacacagagg tgaagctaca gaagactaac aaggagctgg aggacctgag ccagaagctg      300
tttgacctga ggggcaagtt caagaggcca cctctgcgcc gggcgcgcgc gtctgctgat      360
gccatgctgc gtgccctgct gggctccaag cacaagggtca acatggacct ccgggccaac      420
ctgaagcaag tcaagaagga ggacacggag aaggagaagg acctccgcga tgtgggtgac      480
tgagaggaaga acattgagga gaaatctggc atggaggggca ggaagaagat gtttgaggcc      540
ggcgagtcct aa                                                    552
<212> Type : DNA
<211> Length : 552
      SequenceName : chicken skeletal TnI
      SequenceDescription :

```

Custom Codon

Sequence Name : chicken skeletal TnI

Sequence

```

-----
<213> OrganismName : Gallus gallus
<400> PreSequenceString :
MSDEEKKRRA ATARRQHLKS AMLQLAVTEI EKEAAAKEVE KQNYLAEHCP PLSLPGSMQE      60
LQELCKKLHA KIDSVDEERY DTEVKLQKTN KELEDLSQKL FDLRGKFKRP PLRRVRMSAD      120
AMLRALLGSK HKVNMDLRAN LKQVKKEDTE KEKDLRDVGD WRKNIEEKSG MEGRKKMFEA      180
GES                                                    183
<212> Type : PRT
<211> Length : 183
      SequenceName : chicken skeletal TnI prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Gallus gallus
<400> PreSequenceString :

```

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```

atggatgaca tctataaggc ggcggttgag cagttgacag aagaacaaaa aaatgagttt    60
aaggctgcct tcgacatctt cgtgctgggg gcagaggatg gctgcatcag caccaaggag    120
ctggggaagg tgatgaggat gctggggcag aacccacccc ctgaggagct gcaggagatg    180
attgatgagg tggatgagga tggcagtggc actgtggact ttgatgagtt ccttgttatg    240
atggttcggt gtatgaaaga tgacagcaaa ggaaaaactg aagaggagct ctcagatctc    300
ttcaggatgt ttgataagaa tgctgatggc tacatcgatc ttgaggaact gaagatcatg    360
ctacaggcaa ctggagagac gatcactgag gatgacatag aagaactgat gaaagatggg    420
gacaaaaaca atgatggcag gattgactat gacgagttcc tggagtcat gaaggagtt    480
gaataa                                           486
<212> Type : DNA
<211> Length : 486
      SequenceName : chicken cardiac TnC
      SequenceDescription :

```

Custom Codon

Sequence Name : chicken cardiac TnC

Sequence

```

-----
<213> OrganismName : Gallus gallus
<400> PreSequenceString :
MDDIYKAAVE QLTEEQKNEF KAAFDIFVLG AEDGCISTKE LGKVMRMLGQ NPTPEELQEM    60
IDEVDEDGSG TVDFDEFLVM MVRCKMKDDSK GKTEEELSDL FRMFDKNADG YIDLEELKIM    120
LQATGETITE DDIEELMKDG DKNNDGRIDY DEFLEFMKGV E                          161
<212> Type : PRT
<211> Length : 161
      SequenceName : chicken cardiac TnC prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctggt cgagctggac    60
ggcgacgtaa acggccacag gttcagcgtg tccggcgagg gcgagggcga tgccacctac    120
ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc    180
ctcgtgacca ccctgacctg gggcgtgcag tgcttcagcc gctaccccga ccacatgaag    240
cagcacgact tcttcaagtc cgccatgcc gaaggctacg tccaggagcg taccatcttc    300
ttcaaggacg acggcaacta caagaccgc gccgagggtga agttcgaggg cgacaccctg    360
gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac    420
aagctggagt acaactacat cagccacaac gtctatatca ccgccgacaa gcagaagaac    480
ggcatcaagg ccacttcaa gatccgccac aacatcgagg acggcagcgt gcagctcgcc    540
gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac    600
tacctgagca ccagtcctgc cctgagcaaa gacccaacg agaagcgcgga tcacatggtc    660
ctgctggagt tcgtgaccgc cgcccgcatg ctgagcgatg aattgactaa ggagcaaact    720

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G62276PC.WorkFile.txt

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gcattactac gtaatgcatt taatgctttt gaccctgaaa aaaatggata tatcaacaca      780
gctatggtgg gtacgatact tagcatgttg ggtcatcaac ttgatgatgc aactcttgct      840
gacattatcg ctgaagtcga tgaggatggt tcgggccaaa tcgaatttga agaatttacc      900
accctggcag cccgcttcct tgtggaagag gacgctgaag ctatgatggc tgaattgaag      960
gaagctttcc gcctttacga caaagaagga aatggatata taactactgg tgttcttcgt     1020
gaaatcctgc gcgaactaga cgataaattg acaaatgacg acctggacat gatgattgag     1080
gaaattgatt ccgatggatc gggtagtggt gattttgatg aatttatgga agtaatgacc     1140
ggtggcgacg acgagctcat ggtgagcaag ggcgaggagc tgttcaccgg ggtggtgccc     1200
atcctggtcg agctggacgg cgacgtaaac ggccacaagt tcagcgtgtc cggcgagggc     1260
gagggcgatg ccacctacgg caagctgacc ctgaagttca tctgcaccac cggcaagctg     1320
cccgtgccct ggcccaccct cgtgaccacc ttcggctacg gcctgatgtg cttcgcccg     1380
taccgacgac acatgcgcca gcacgacttc ttcaagtccg ccatgcccga aggctacgtc     1440
caggagcgca ccatcttctt caaggacgac ggcaactaca agaccgcgc cgaggtgaag     1500
ttcgagggcg acaccctggt gaaccgcacg gagctgaagg gcatcgactt caaggaggac     1560
ggcaacatcc tggggcacia gctggagtac aactacaaca gccacaacgt ctatatcatg     1620
gccgacaagc agaagaacgg catcaaggcc aacttcaaga tccgccacaa catcgaggac     1680
ggcagcgtgc agctcgccga ccactaccag cagaacaccc ccatcggcga cggccccgtg     1740
ctgctgcccc acaaccacta cctgagctac cagtccgccc tgagcaaaga cccaacgag     1800
aagcgcgatc acatggtcct gctggagttc gtgaccgccg ccgggatcac tctcggcatg     1860
gacgagctgt acaagtaa                                     1878
<212> Type : DNA
<211> Length : 1878
      SequenceName : TN-TPC1
      SequenceDescription :

```

Custom Codon

```

-----
Sequence Name : TN-TPC1

```

Sequence

```

-----
<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
MVSKGEELFT GVPILVELD GDVNGHRFSV SGEGEDATY GKLTCLKFICT TGKLPVPWPT      60
LVTTLTWGVQ CFSRYPDHMK QHDFFKSAMP EGYVQERTIF FKDDGNYKTR AEVKFEGDTL     120
VNRIELKGID FKEDGNILGH KLEYNYISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA     180
DHYQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHML LLEFVTAARM LSDELTKEQT     240
ALLRNAFNAF DPEKNGYINT AMVGTILSML GHQLDDATLA DIIAEVEDDG SGQIEFEEFT     300
TLAARFLVEE DAEAMMAELK EAFRLYDKEG NGYITTGVLR EILREDDKL TNDDLMMIE      360
EIDSDGSGTV DFDEFMEVMT GGDELMMVSK GEELFTGVVP ILVELDGDVN GHKFSVSGEG     420
EGDATYGKLT LKFICTTGKL PVPWPTLVTT FGYGLMCFAR YPDHMRQHDF FKSAMPEGYV     480

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QERTIFFKDD GNYKTRAEVK FEGDTLVNRI ELKGIDFKED GNILGHKLEY NYNSHNVYIM 540
 ADKQKNGIKA NFKIRHNIED GSVQLADHYQ QNTPIGDGPV LLPDNHYLSY QSALSKDPNE 600
 KRDHMVLLLEF VTAAGITLGM DELYK 625
 <212> Type : PRT
 <211> Length : 625
 SequenceName : TN-TPC1 prot
 SequenceDescription :

Sequence

<213> OrganismName : Artificial Sequence

<400> PreSequenceString :

atggtgagca agggcgagga gctgttcacc ggggtggtgc ccatcctggt cgagctggac 60
 ggcgacgtaa acggccacag gttcagcgtg tccggcgagg gcgagggcga tgccacctac 120
 ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc 180
 ctcgtgacca ccctgacctg gggcgtgcag tgcttcagcc gctaccccga ccacatgaag 240
 cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg taccatcttc 300
 ttcaaggacg acggcaacta caagaccgcg gccgaggtga agttcgaggg cgacaccctg 360
 gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac 420
 aagctggagt acaactacat cagccacaac gtctatatca ccgccgacaa gcagaagaac 480
 ggcataaagg ccacttcaa gatccgccac aacatcgagg acggcagcgt gcagctcgcc 540
 gaccactacc agcagaacac ccccatcggc gacggccccg tgctgctgcc cgacaaccac 600
 tacctgagca cccagtccgc cctgagcaaa gaccccaacg agaagcgcgga tcacatggtc 660
 ctgctggagt tcgtgaccgc cgcccgcatt ctgactaagg agcaaactgc attactacgt 720
 aatgcattta atgcttttga ccctgaaaaa aatggatata tcaacacagc tatggtgggt 780
 acgatactta gcatgttggg tcatcaactt gatgatgcaa ctcttgctga cattatcgct 840
 gaagtcgatg aggatgggtc gggccaaatc gaatttgaag aatttaccac cctggcagcc 900
 cgcttccttg tggaagagga cgctgaagct atgatggctg aattgaagga agctttccgc 960
 ctttacgaca aagaaggaaa tggatatata actactggtg ttcttcgtga aatcctgcgc 1020
 gaactagacg ataaattgac aaatgacgac ctggacatga tgattgagga aattgattcc 1080
 gatggatcgg gtactgttga ttttgatgaa tttatggaag taatgaccgg tggcgacgac 1140
 gagctcatgg tgagcaaggg cgaggagctg ttcaccgggg tggtgcccac cctgggtcgag 1200
 ctggacggcg acgtaaacgg ccacaagttc agcgtgtccg gcgagggcga gggcgatgcc 1260
 acctacggca agctgaccct gaagttcatc tgcaccaccg gcaagctgcc cgtgccctgg 1320
 cccaccctcg tgaccacctt cggtacggc ctgatgtgct tcgcccgcta ccccgaccac 1380
 atgcgccagc acgacttctt caagtccgcc atgcccgaag gctacgtcca ggagcgacac 1440
 atcttcttca aggacgacgg caactacaag acccgcgccg aggtgaagtt cgagggcgac 1500
 accctggtga accgcatcga gctgaagggc atcgacttca aggaggacgg caacatcctg 1560
 gggcacaagc tggagtacaa ctacaacagc cacaacgtct atatcatggc cgacaagcag 1620

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aagaacggca tcaaggccaa cttcaagatc cgccacaaca tcgaggacgg cagcgtgcag      1680
ctcgccgacc actaccagca gaacaccccc atcggcgacg gccccgtgct gctgccccgac      1740
aaccactacc tgagctacca gtccgccctg agcaaagacc ccaacgagaa gcgcgatcac      1800
atggctcctgc tggagttcgt gaccgccgcc gggatcactc tcggcatgga cgagctgtac      1860
aagtaa                                          1866
<212> Type : DNA
<211> Length : 1866
      SequenceName : TN-TPC1-L5
      SequenceDescription :

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Custom Codon

```

-----
Sequence Name : TN-TPC1-L5

```

Sequence

```

-----
<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
MVSKGEELFT GVPVILVELD GDVNGHRFSV SGEGEGDATY GKLTCLKFICT TGKLPVPWPT      60
LVTTLTWGVQ CFSRYPDHMK QHDFFKSAMP EGYVQERTIF FKDDGNYKTR AEVKFEGDTL      120
VNRIELKGID FKEDGNILGH KLEYNYISHN VYITADKQKN GIKAHFKIRH NIEDGSVQLA      180
DHYQNTPIG DGPVLLPDNH YLSTQSALSK DPNEKRDHML LLEFVTAARM LTKEQTALLR      240
NAFNAFDPEK NGYINTAMVG TILSMLGHQL DDATLADIIA EVDEGSGQI EFEEFTTLAA      300
RFLVEEDAEA MMAELKEAFR LYDKEGNGYI TTGVLREILR ELDDKLTNDD LDMMIEEIDS      360
DGSQTVDFDE FMEVMTGGDD ELMVSKGEEL FTGVVPILVE LDGDVNGHKF SVSGEGEGDA      420
TYGKLTCLKFI CTTGKLPVPW PTLVTTFGYG LMCFARYPDH MRQHDFFKSA MPEGYVQERT      480
IFFKDDGNYK TRAEVKFEGD TLVNRIELKG IDFKEDGNIL GHKLEYNYNS HNVYIMADKQ      540
KNGIKANFKI RHNIEDGSVQ LADHYQNTIP IGDGPVLLPD NHYLSYQSAL SKDPNEKRDH      600
MVLLEFVTAA GITLGMDELY K                                          621
<212> Type : PRT
<211> Length : 621
      SequenceName : TN-TPC1-L5 prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Drosophila melanogaster
<400> PreSequenceString :
atgagcgatg aattgactaa ggagcaaact gcattactac gtaatgcatt taatgctttt      60
gaccctgaaa aaaatggata tatcaacaca gctatggtgg gtacgatact tagcatgttg      120
ggtcatcaac ttgatgatgc aactcttgct gacattatcg ctgaagtcga tgaggatggt      180
tcgggccaata tcgaatttga agaatttacc accctggcag cccgcttcct tgtggaagag      240
gacgctgaag ctatgatggc tgaattgaag gaagctttcc gcctttacga caaagaagga      300
aatggatata taactactgg tgttcttcgt gaaatcctgc gcgaactaga cgataaattg      360
acaaatgacg acctggacat gatgattgag gaaattgatt ccgatggatc ggggtactgtt      420
gattttgatg aatttatgga agtaatgacc ggtggcgacg actaa                                          465
<212> Type : DNA

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<211> Length : 465
SequenceName : Drosophila TnC isoform1
SequenceDescription :

Custom Codon

Sequence Name : Drosophila TnC isoform1

Sequence

<213> OrganismName : Drosophila melanogaster
<400> PreSequenceString :
MSDELTKEQT ALLRNAFNAF DPEKNGYINT AMVGTILSML GHQLDDATLA DIIAEVEDDG 60
SGQIEFEEFT TLAARFLVEE DAEAMMAELK EAFRLYDKEG NGYITTGVLR EILRELDLKL 120
TNDDLMMIE EIDSDGSGTV DFDEFMEVMT GGDD 154
<212> Type : PRT
<211> Length : 154
SequenceName : Drosophila TnC isoform1 prot
SequenceDescription :

Sequence

<213> OrganismName : Drosophila melanogaster
<400> PreSequenceString :
atggacaaca ttgacgaaga cctgaccccc gagcagattg ccgttctgca gaaggcattc 60
aacagcttcg accaccagaa gaccggcagt atccccaccg aaatggtggc cgatatactc 120
cgtcttatgg gtcagccctt cgacaggcag atccttgacg agctgatgca cgaggctgat 180
gaggacaaat ccggtcgcct ggagttcgag gagttcgtcc agctggctgc caagttcatc 240
gtagaggagg atgatgaggc catgcagaag gacgtgcgcg aggctttccg tctgtacgac 300
aagcagggca atggctacat tcccacctcc tgcctgaagg agatcctcaa ggaactggac 360
gaccagctga ccgaacagga gctcgacatc atgattgagg aaatcgattc cgacggctct 420
ggcaccgttg attttgatga attcatggag atgatgactg gcgagtaa 468
<212> Type : DNA
<211> Length : 468
SequenceName : Drosophila TnC isoform2
SequenceDescription :

Custom Codon

Sequence Name : Drosophila TnC isoform2

Sequence

<213> OrganismName : Drosophila melanogaster
<400> PreSequenceString :
MDNIDEDLTP EQIAVLQKAF NSFQHQKTGS IPTEMVADIL RLMGQPFDRQ ILDELMHEVD 60
EDKSGRLEFE EFVQLAAKFI VEEDDEAMQK DVREAFRLYD KQGNGYIPTS CLKEILKELD 120
DQLTEQELDI MIEEIDSDGS GTVDFDEFME MMTGE 155
<212> Type : PRT
<211> Length : 155
SequenceName : Drosophila TnC isoform2 prot
SequenceDescription :

Sequence

<213> OrganismName : Drosophila melanogaster
<400> PreSequenceString :

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atgagcagcg tcgatgaaga tcttacaccc gagcagatcg ccgtgctcca gaaggcgttc      60
aacagcttcg atcaccagaa gactgggtcc atccccaccg agatggctcg cgacatcctg      120
cgcctgatgg gtcagccctt cgacaagaag atcctggagg aactgatcga ggaggctgat      180
gaggacaagt ccggtcgctt ggaattcggc gagttcgctc agctggctgc caagttcatc      240
gtggaggagg atgcggaggc catgcagaag gagctggccg aggcgttccg tttgtacgat      300
aagcagggca atggcttcat tcccaccacc tgcctgaagg agatcctcaa ggagctggac      360
gaccagctga ccgaacagga gctggacatt atgatcgagg agatcgattc cgatggctcc      420
ggtacagtgg atttcgatga attcatggag atgatgactg gcgagtaa                    468
<212> Type : DNA
<211> Length : 468
      SequenceName : Drosophila TnC isoform3
      SequenceDescription :

```

Custom Codon

Sequence Name : Drosophila TnC isoform3

Sequence

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<213> OrganismName : Drosophila melanogaster
<400> PreSequenceString :
MSSVDEDLTP EQIAVLQKAF NSFQHQKTGS IPTEMVADIL RLMGQPFDDK ILEELIEEVD      60
EDKSGRLEFG EFVQLAAKFI VEEDAEAMQK ELAEAFRLYD KQNGFIPTT CLKEILKELD      120
DQLTEQELDI MIEEIDSDGS GTVDFDEFME MMTGE                                155
<212> Type : PRT
<211> Length : 155
      SequenceName : Drosophila TnC isoform3 prot
      SequenceDescription :

```

Sequence

```

-----
<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
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agcaccaagg gcgccctgac cttcagcccc tacctgctga gccacgtgat gggctacggc      180
ttctaccact tcggcaccta cccagcggc tacgagaacc cttcctgca cgccatcaac      240
aacggcggct acaccaacac ccgcatcgag aagtacgagg acggcggcgt gctgcacgtg      300
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ggcttccccg aggacagcgt gatcttcacc gacaagatca tccgcagcaa cgccaccgtg      420
gagcacctgc acccatggg cgataacgtg ctggtgggca gcttcgccc cacccttcagc      480
ctgcgcgacg gcggctacta cagcttcgtg gtggacagcc acatgcactt caagagcgcc      540
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ctgcacagca acaccgagct gggcatcgtg gagtaccagc acgccttcaa gaccccgatc      660
gcattcgccc gcatgctcag cgaggagatg attgctgagt tcaaagctgc ctttgacatg      720
tttgatgcgg acggtggtgg ggacatcagc accaaggagt tgggcacggt gatgaggatg      780

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G62276PC.WorkFile.txt

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ctgggccaga accccaccaa agaggagctg gatgccatca tcgaggaggt ggacgaggat      840
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gacgccaagg gcaagtctga ggaggagctg gccaaactgct tccgcatctt cgacaagaac      960
gctgatgggt tcatcgacat cgaggagctg ggtgagattc tcagggccac tggggagcac     1020
gtcatcgagg aggacataga agacctcatg aaggattcag acaagaacaa tgacggccgc     1080
attgacttcg atgagttcct gaagatgatg gaggggtgtgc aggagctcat gtccagcggc     1140
gccctgctgt tccacggcaa gatcccctac gtggtggaga tggagggcaa tgtggatggc     1200
cacaccttca gcatccgcgg caagggctac ggcgatgcca gcgtgggcaa ggtggatgcc     1260
cagttcatct gcaccaccgg cgatgtgccc gtgccctgga gcacctggt gaccacctg      1320
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tgcattcccc atggctacgt gcaggagcgc accatcacct tcgagggcga tggcaatttc     1440
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ggccagggct tcaagaagga tggccacgtg ctgggcaaga atctggagtt caatttcacc     1560
ccccactgcc tgtacatctg gggcgatcag gccaatcacg gcctgaagag cgccttcaag     1620
atctgccacg agatcaccgg cagcaagggc gatttcacgt tggccgatca caccagatg     1680
aataccccca tcggcggcgg ccccgatcac gtgcccagat accaccacat gagctaccac     1740
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cgcgccgtgg attgccgcaa gacctacctg tga                                  1833
<212> Type : DNA
<211> Length : 1833
      SequenceName : Cop-L15-Phi
      SequenceDescription :

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Custom Codon

Sequence Name : Cop-L15-Phi

Sequence

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<213> OrganismName : Artificial Sequence
<400> PreSequenceString :
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FYHFGTYPST YENPFLHAIN NGGYTNTRIE KYEDGGVLHV SFSYRYEAGR VIGDFKVVGT     120
GFPEDSVIFT DKIIIRSNATV EHLHPMGDNV LVGSFARTFS LRDGGYYSFV VDSHMHFKSA     180
IHPSILQNGG PMFAFRREEE LHSNTELGIV EYQHAFKTPF AFARMLSEEM IAEFKAAFDN     240
FDADGGGDIS TKELGTVMRM LGQNPTKEEL DAIIEEVEDD GSGTIDFEEF LVMMVRQMKE     300
DAKGKSEEL ANCFRIFDKN ADGFIDIEEL GEILRATGEH VIEEDIEDLM KDSDKNNDGR     360
IDFDEFLKMM EGVQELMSSG ALLFHGKIPY VVEMEGNVDG HTFSIRGKGY GDASVGKVDA     420
QFICTTGDVP VPWSTLVTTT TYGAQCFAKY GPELKDFYKS CMPDGYVQER TITFEGDGNF     480
KTRAEVTFEN GSVYNRVKLN GQGFKKDGHV LGKNLEFNFT PHCLYIWGDQ ANHGLKSAFK     540
ICHEITGSKG DFIVADHTQM NTPIGGGPVH VPEYHHMSYH VKLSKDVTDH RDNMSLKETV     600

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RAVDCRKTYL

610

<212> Type : PRT

<211> Length : 610

SequenceName : Cop-L15-Phi prot

SequenceDescription :